Request for First Extension of Time

Applicants hereby request a first extension of time for reply of one month under 37 CFR 1.137(a)(1) and authorizes the Commissioner to charge our deposit account (09-0441) the requisite fees under 37 CFR 1.17(a)(1).

Remarks/Discussion

The Art of Record

The primary reference was Published Patent Application 2002/0138487 to Weiss et al. for Method And System For Mapping And Searching The Internet And Displaying The Results In A Visual Form describes a method for carrying out a search of Web sites according to a search criteria. Weiss' method comprises the steps of (a) pre-indexing the sites of the Web, including grouping the Web sites according to predefined group-criteria; (b) pre-classifying each Web site according to a predefined set of properties; (c) pre-visual-formulating each Web site according to its identified properties; and (d) upon searching of Web sites that sustain a search criterion, displaying the formed site results divided into these pre-indexed groups where each site within a group is displayed according to its visual-formulation.

Weiss et al., paragraph [0008][1] was cited against claims 6, 18, and 26. Weiss. paragraphs [0031]-[0032][2] was cited against claims 1, 4, 6, 9, 15, 16, 21, and 26.

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1 [0008] Most other search Web applications are highly automated, sending "Spider" programs out on the Web around the clock to collect the text of Web pages. Spiders follow all the links on a page and put all the text into a database. Sometimes a Web site offers both--a search engine and directory capabilities.

2 [0031] Preferably, the set of properties comprises parameters relating to the site's importance, the nature of the site's owner, the existence of an e-store within the site, the existence of a "chat room" within the site, the existence of a forum within the site, the existence of multimedia file(s) and/or their amount and/or size within the site, the frequent used keywords in the textual data of the site, whether the site in "official", the essence of the site, and/or the amount of information in the site.

Weiss, paragraph [0046] was cited against claims[3] 1, 4, 6, 9, 25, and 26. Weiss, paragraph [0106][4] is cited against claims 7 and 17. Paragraphs [0137]-[0139][5] are cited against claims 1, 2, and 4. Weiss, paragraphs [0147]-[0150][6] are cited

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[0032] Preferably, the importance of a Web site is a function of the hyperlinks pointing to and from a Web site.

[3] [0046] Preferably, the analyzing is carried out by detecting keywords frequently used in a determined group.

[4] [0106] Marked as 101, is the process that is made by the searching facility that includes Clustering and Labeling. As a result, trees of Clusters are constructed. The Web sites of the Internet are scanned and the titles of the Web sites, the links and the addresses of the pages in which predefined keywords are found are stored in a database. Then, a Clustering algorithm is executed on the collected data in order to determine clusters. Then the detected Clusters are labeled by a Labeling process.

[5] [0137] FIG. 7 schematically illustrates an example of a presentation of the results of the first stage of a search, according to a preferred embodiment of the invention. The search was for the phrase "Charlie's Angels". Optionally, the results are presented in a 2-D map on which the main clusters are displayed as continents: the Sport continent, the Entertainment continent, the Health continent, etc. The Clusters, in which the term "Charlie's Angels" appeared, are marked for the user. Of course alternatively this presentation can be a textual presentation or most preferably 3D presentation.

[0138] The size of the continent is preferably proportional to the number of Web sites included in that Cluster. Since the Entertainment cluster contains more Web sites than the Sport cluster, it is of greater size in this example.

[0139] After selecting the Entertainment "continent" (the selection being carried out by clicking the selected object), the user is presented with the "countries"--TV series, Movies, Plays, Music, etc. Again, The countries, in which the search subjects have been found, are being marked to the user (see FIG. 8). The size of the "country" is proportional to the number of the Web sites of this entity.

[6] [0147] a Spider program 22, for scanning the Web sites of the Internet;

[0148] a Database 24, for storing the information collected by the Spider program 22;

[0149] an Indexing application 23, for carrying out the clustering, labeling and classification of the Web sites. The indexing is a process, which is carried out independent of the search process, and its purpose is to organize all the Web sites of the Web prior to the search. For example, the indexing concerns organizing all the Web sites in clusters, classifying the Web sites according to predetermined properties, etc.; and

[0150] a Seeker application program/server 28 for interacting with the users 25, carrying out the search (by the appropriate queries to database 24) and for sending the results to the users 25 (usually as Web pages, which usually perform a visual presentation of user's Web browser).

against claims 1, 4, 6, 9, 13, 15, 16, 20, 25, and 26. Weiss, paragraph[0155][7] is cited against claims 6, 18, and 26. Weiss paragraph [0158][8] is cited against claims 1, 4, 16, and 25.

United States Patent 6,638,317 to Nakao for Apparatus And Method For Generating Digest According To Hierarchical Structure Of Topic describes a digest generator for calculating a lexical cohesion degree at each position in a document. The digest generator does this using a plurality of windows having different sizes, and calculates the candidate section of a topic boundary for each topic level corresponding to the size of a window. By unifying the candidate section of different levels, the digest generator detects the topic boundary for each level. Then, based on the relation between a summarization-target topic passage and a long topic passage containing the summarization-target topic passage the digest generator extracts key sentences and generates a digest.

Nakao, column 8, lines 35-63[9] were cited against claims 13, 16, and 18., and column 10, lines 62-67[10] were cited against claims 13, 16, and 18. Claim 10[11] of Nakao was cited against claims 4, 6, 9, 25, and 26.

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[7] [0155] According to an embodiment of the present invention, the Indexing 23 comprises the activities of Clustering, Labeling and Classification of the Web sites according to the predefined attributes, as described above. A Spider program 22 scans the Web sites of the Internet. The found Web sites are added to a database 24. By implementing Clustering method(s) a tree of Clusters is obtained. The gathered information (tree of Clusters, and the list of Web sites and their classification) is stored in database 24.

[8] [0158] Then a query is posted from the system to database 24, and the results of the query are presented to the user. This stage is carried out by a Seeker program 32. The results of the search may be presented in a textual form or, but preferably in a graphical form described above (marked as 33). If the user is not satisfied with the search results, then the system may interview the user in order to focus the search, and the system posts a new query to the database 24.

[9] The topic structure detector unit 26 comprises a topic boundary candidate section detector unit 27, and automatically detects document parts describing a common topic (topic passage) using the topic boundary candidate section detector unit 27. The topic boundary candidate section detector unit 27 as a sub-module of the topic structure detector unit 26 detects sections having a low lexical cohesion degree as candidate sections of a topic boundary. A lexical cohesion degree is an index indicating the strength of lexical cohesion in the neighborhood of each position in the input document 11, and for example, is calculated from the similarity of a vocabulary appearing in windows of a certain width set up before and after each position.

United States Patent 6,289,342 to Lawrence et al. for Autonomous Citation Indexing And Literature Browsing Using Citation Context describes an autonomous citation indexing system. The system can be used as an assistant agent to automate and enhance finding publications in electronic form, including publications located on the world wide web. This is disclosed to be done by parsing citations from papers and identifying citations to the same paper that may differ in syntax. The system also extracts and provides the context of citations to a given paper, allowing a researcher to determine what is published in other papers about a given paper. Common citations and word or string vector distance similarity are used to find related articles in a search. Figure 3 was cited against claims 8, 14, and 15. Figure 3 is described in the specification as "FIG. 3 shows the results of the query dempster. The articles have been ranked by the number of citations to the articles."

The major part specifying unit 28 removes topic passages having a low lexical cohesion degree to suppress the subsequent processes of these passages, and outputs only the major parts of the document for a digest. The keyword extractor unit 29 evaluates whether or not a word used in the topic passage detected by the topic structure detector unit 26 is characteristic of the topic, and extracts only words appearing characteristically as keywords.

The sentence selector unit 30 selects sentences containing many keywords for each topic passage, and arranges the selected sentences in the appearance order in the original document 11. Then, the sentence selector unit 30 inserts marks for indicating the existence of the unselected sentences, paragraph boundaries, etc., if necessary, and generates a digest 13. The output unit 31 outputs the generated digest 13 as the processed result.

[10] FIG. 4 shows computer-readable storage media for supplying the information processing device shown in FIG. 3 with the programs and data. The programs and data stored in the portable storage medium 49 and an external database 50 are loaded to the memory 47. The CPU 43 runs the programs using the data, and performs necessary processes.

[11] 10. A digest generator apparatus, comprising: a keyword extracting unit evaluating whether or not a word is characteristic of a process target topic passage in a document by calculating a likelihood ratio based on a comparison of a use frequency of the word in the process target topic passage with a use frequency of the word in a longer topic passage including the process target topic passage and comparing the likelihood ratio to a predetermined threshold value, and extracting a keyword from the process target topic passage when the likelihood ratio is greater than the predetermined threshold value; a generating unit generating a digest according to a use condition of said keyword; and an outputting unit outputting said digest.

U.S. Patent 5,875,446 to Brown et al. for System And Method For Hierarchically Grouping And Ranking A Set Of Objects In A Query Context Based On One Or More Relationships describes a system for hierarchically ranking topically relevant objects in an object database. These topically relevant objects are first identified using generally known methods to obtain a set of topically relevant objects (topically relevant set). Parents, (including ancestors), of one or more of the topically relevant objects are identified according to directional structural relationships that the parents have with respect to the topically relevant objects. These objects form a set of structurally relevant objects (structurally relevant set). In some embodiments, the user query identifies one or more of these structural relationships. The topically relevant objects are then organized under one or more of their respective parents to form a hierarchy level of both (topically relevant and structurally relevant) sets of objects. The process can iterate to create more than one hierarchy level.

Brown, column 4, lines 43-45[12] is cited against claims 4, 16, and 25, while column 16, lines 13-29[13]

U.S. Patent 6,665,659 to Logan for Methods And Apparatus For Distributing And Using Metadata Via The Internet describes a system for selectively distributing information from a multiplicity of Internet resources to a user in a way that make

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12 An object of this invention is a system and method that generates a hierarchical grouping of topically and structurally relevant objects in a query context..

13 The result of step 900 is a display of ranked hierarchies where children are shown grouped and indented under their parent. An example of such a display is shown in FIG. 13. FIG. 13 shows a sample output result of the system. The Figure shows the result of iterating step 635 once, such that a two level hierarchy is generated. The original topically relevant objects supplied in step 610 are displayed indented as 1320. The structurally relevant parent objects found after one iteration of step 635 are displayed non-indented as 1310. The parent objects 1310 form the next level of the hierarchical view, provide navigational starting points for browsing the relevant objects, and group the topically relevant child objects 1320. The display provides the end user with insight into the structure of the object collection being searched. Attributes for each of the objects shown in the display are obtained from the Object Catalog 210 and Attribute Tables 250.

it easier for the user to quickly identify information of particular interest. The system of Logan et al. employs a server for generating a central library of citations, each containing metadata that describes selected information from a resource identified by a URL. The server works in conjunction with a client computer which requests information on a topic or topics of interest by supplying preference data to the server. In response, the server delivers a subset of the citations to the client computer which match the preference data from the client. The client computer places this subset of citations in a local store where they may be compared with user requests by matching the metadata in each citation to criteria specified by the user. In addition, the locally stored citations may be sorted into a particular order in response to a user request. The filtered and sorted citations may then be used to present desired information to the user, either by displaying metadata contained in the citation or by using the URL in the citation to fetch relevant information via the Internet from the original resource.

Logan, column 1, lines 7-10, "Field of the Invention"[14] is applied against claims 9 and 20, while column 8, lines 21-29[15] is applied against claim 10.

The Final Action of January 30, 2006

The art was applied as shown in the Table below.

The primary reference, Weiss et al, [16] was variously applied with Brown[17], Lawrence[18], and Logan[19] as shown in the table below.

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[14] This invention relates to electronic information distribution systems and more particularly to a method for indexing, combining, managing and distributing information via the Internet.

[15] In addition, the rendering program 141 may include means for accepting a rating value from the user indicating the user's assessment of the quality or usefulness of that citation. If desired, a user may be permitted to compose and attach a user's review of the information specified by a particular citation, or a user-generated cross-reference to a related citation, providing an open-ended forum for review, ranking, comment, and cross-linking to be associated with each citation.

[16] [0008] Most other search Web applications are highly automated, sending "Spider" programs out on the Web around the clock to collect the text of Web pages. Spiders follow all the links on a

page and put all the text into a database. Sometimes a Web site offers both--a search engine and directory capabilities.

[0031] Preferably, the set of properties comprises parameters relating to the site's importance, the nature of the site's owner, the existence of an e-store within the site, the existence of a "chat room" within the site, the existence of a forum within the site, the existence of multimedia file(s) and/or their amount and/or size within the site, the frequent used keywords in the textual data of the site, whether the site in "official", the essence of the site, and/or the amount of information in the site.

[0032] Preferably, the importance of a Web site is a function of the hyperlinks pointing to and from a Web site.

[0106] Marked as 101, is the process that is made by the searching facility that includes Clustering and Labeling. As a result, trees of Clusters are constructed. The Web sites of the Internet are scanned and the titles of the Web sites, the links and the addresses of the pages in which predefined keywords are found are stored in a database. Then, a Clustering algorithm is executed on the collected data in order to determine clusters. Then the detected Clusters are labeled by a Labeling process.

[0137] FIG. 7 schematically illustrates an example of a presentation of the results of the first stage of a search, according to a preferred embodiment of the invention. The search was for the phrase "Charlie's Angels". Optionally, the results are presented in a 2-D map on which the main clusters are displayed as continents: the Sport continent, the Entertainment continent, the Health continent, etc. The Clusters, in which the term "Charlie's Angels" appeared, are marked for the user. Of course alternatively this presentation can be a textual presentation or most preferably 3D presentation.

[0139] After selecting the Entertainment "continent" (the selection being carried out by clicking the selected object), the user is presented with the "countries"--TV series, Movies, Plays, Music, etc. Again, The countries, in which the search subjects have been found, are being marked to the user (see FIG. 8). The size of the "country" is proportional to the number of the Web sites of this entity.

[0147] a Spider program 22, for scanning the Web sites of the Internet;

[0148] a Database 24, for storing the information collected by the Spider program 22;

[0149] an Indexing application 23, for carrying out the clustering, labeling and classification of the Web sites. The indexing is a process, which is carried out independent of the search process, and its purpose is to organize all the Web sites of the Web prior to the search. For example, the indexing concerns organizing all the Web sites in clusters, classifying the Web sites according to predetermined properties, etc.; and

[0150] a Seeker application program/server 28 for interacting with the users 25, carrying out the search (by the appropriate queries to database 24) and for sending the results to the users 25 (usually as Web pages, which usually perform a visual presentation of user's Web browser).

[0155] According to an embodiment of the present invention, the Indexing 23 comprises the activities of Clustering, Labeling and Classification of the Web sites according to the predefined attributes, as described above. A Spider program 22 scans the Web sites of the Internet. The found Web sites are added to a database 24. By implementing Clustering method(s) a tree of

Claim #1	Objections and §112	§103 – Weiss + Nakao	§103 – Weiss + Nakao, Brown	§103 – Weiss + Nakao, Lawrence	§103 – Weiss + Nakao, Logan
1	X	X			
2	X	X			
3					
4	X		X		
5	X		X		
6	X	X			
7	X	X			
8	X			X	

Clusters is obtained. The gathered information (tree of Clusters, and the list of Web sites and their classification) is stored in database 24.

[0158] Then a query is posted from the system to database 24, and the results of the query are presented to the user. This stage is carried out by a Seeker program 32. The results of the search may be presented in a textual form or, but preferably in a graphical form described above (marked as 33). If the user is not satisfied with the search results, then the system may interview the user in order to focus the search, and the system posts a new query to the database 24.

[17] Column 4, lines 43-45:
An object of this invention is a system and method that generates a hierarchical grouping of topically and structurally relevant objects in a query context.

Column 16, lines 13-29:
The result of step 900 is a display of ranked hierarchies where children are shown grouped and indented under their parent. An example of such a display is shown in FIG. 13. FIG. 13 shows a sample output result of the system. The Figure shows the result of iterating step 635 once, such that a two level hierarchy is generated. The original topically relevant objects supplied in step 610 are displayed indented as 1320. The structurally relevant parent objects found after one iteration of step 635 are displayed non-indented as 1310. The parent objects 1310 form the next level of the hierarchical view, provide navigational starting points for browsing the relevant objects, and group the topically relevant child objects 1320. The display provides the end user with insight into the structure of the object collection being searched. Attributes for each of the objects shown in the display are obtained from the Object Catalog 210 and Attribute Tables 250.

[18] For Figure 3, and its teaching of an "autonomous citation index system."

[19] Column 1, lines 7-10:
This invention relates to electronic information distribution systems and more particularly to a method for indexing, combining, managing and distributing information via the Internet.

Column 5, lines 3-10:
The metadata which describes a particular resource need not be derived directly from that resource; for example, external resources which link to or which review a given resource may be used as a source of metadata which describes the given resource. By way of example, reviews or comments on a given Web site may be analyzed to develop an attribute value which quantifies the degree to which such comments and reviews were favorable or unfavorable.

9	X				X
10	X				X
13		X			
14				X	
15				X	
16			X		
17			X		
18		X			
19		X			
20					X
21					X
24	X	X			
25	X		X		
26	X	X			

Remarks/Arguments

With reference to the Final Action mailed January 30, 2006, Applicants offer the following remarks and argument.

Status of the Claims

Applicants have previously canceled claims 11-13 and 28 as drawn to a non-elected invention. The pending claims are claims 1,2, 4-10 and 13-22, and 24-27, being the claims of Group 1.

The remaining claims, or the base claims on which they depend, have been substantially amended to positively recite and characterize the "extraction" process. In that regard, claims 1[20] and 16[21] are exemplary.

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[20] (Currently Amended) 1. An information rearrangement method for rearranging information obtained from information sources connected via a network comprising: an information collection step of collecting information from a predetermined number of registered sites; an information element extraction step of extracting, from among said collected information, information elements that include the same facts that are referred to at multiple sites, said information element extraction step comprising selecting, from keywords of information elements included in one set, a keyword having an appearance rate that is equal to or greater than a threshold value, said keywords comprising words that are keywords ~~effective~~ for determining the same facts included in the information elements, and chosen from the group consisting of anchors, links, text, nouns, predetermined proper nouns; and predetermined verbs; and a display step of displaying the contents of said extracted information elements while changing the display state of said contents in accordance with the number of sites whereat said facts are referred to; said step of displaying comprising extracting a set of important information elements on a sentence level from a group composed of a predetermined number of sites, and folding the display for the same sets of important information elements.

[21] (Previously Amended) 16. An information processing apparatus for rearranging information obtained from information sources connected via a network comprising: information collection means for collecting information from a predetermined number of registered sites; information element extraction means for extracting, from among said collected information, information elements that include the same facts that are referred to at multiple sites, the information element extraction means comprising a keyword extraction means for extracting keywords based on keywords for metadata stored in a metadata; a keyword importance level calculation means for calculating a keyword importance; a sentence-level information element extraction means for calculating a set of sentence-level information elements, a topic keyword extraction means for extracting from the entire set of information elements extracted by the

Discussion

Objections and Rejections under 35 USC 112

Applicants have amended the claims to obviate the objections and the rejections under 35 USC 112.

Specifically, Applicants have canceled "effective" and replaced with the term "keyword."

Rejections Under 35 USC 103

Applicants claims define an invention that is allowable over. Claim 1 is exemplary, and the discussion herein wil be with respect to Claim 1.

Claim 1 as amended is as follows:

> 1. An information rearrangement method for rearranging information obtained from information sources connected via a network comprising:
>
> an information collection step of collecting information from a predetermined number of registered sites;

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sentence-level information elements extraction means, and a word-level information element extraction means, for extracting information elements in which a combination of keywords that are obtained by the keyword importance level calculation means appear, topic keyword extraction means for extracting a topic keyword that represents the entire set of information elements to be extracted, said topic keyword extraction means comprising a representative keyword extraction means, a set representative keyword extraction means, and a topic keyword collection means, whereby results extracted by sentence-level important information element extraction means, topic keyword extraction means, and word-level important information element extraction means are stored in an important information element; and display means for displaying the contents of said extracted information elements, while displaying said extracted topic keyword at a position different from the contents concerning said information elements.

an information element extraction step of extracting, from among said collected information, information elements that include the same facts that are referred to at multiple sites, said information element extraction step comprising selecting, from keywords of information elements included in one set, a keyword having an appearance rate that is equal to or greater than a threshold value, said keywords comprising words that are keywords ~~effective~~ for determining the same facts included in the information elements, and chosen from the group consisting of anchors, links, text, nouns, predetermined proper nouns; and predetermined verbs;

and a display step of displaying the contents of said extracted information elements while changing the display state of said contents in accordance with the number of sites whereat said facts are referred to;

said step of displaying comprising extracting a set of important information elements on a sentence level from a group composed of a predetermined number of sites, and folding the display for the same sets of important information elements.

Starting with Applicants' claim preamble,. "An information rearrangement method for rearranging information obtained from information sources connected via a network comprising:"

It is seen that applicants' claim preamble is totally different from Weiss's Summary, i.e.,

> [0029] In one aspect, the present invention is directed to a method for carrying out a search of Web sites according to a search criteria, comprising: pre-indexing the sites of the Web, including grouping the Web sites according to predefined group-criteria; pre-classifying each Web site according to a predefined set of properties; pre-visual-formulating each Web site according to its identified properties; and upon searching of Web sites that sustain a search criterion, displaying the formed site results divided into the pre-indexed groups wherein each site within a group is displayed according to its visual-formulation.

That is, "a search of web sites" where the search is "according to a search criteria" with "pre-indexing the sites of the Web, including grouping the Web sites according to predefined group-criteria; pre-classifying each Web site according to a predefined set of properties; pre-visual-formulating each Web site according to its identified properties; and upon searching of Web sites that sustain a search criterion, displaying the formed site results divided into the pre-indexed groups wherein each site within a group is displayed according to its visual-formulation."

Applicants' claim 1 calls for "selecting, from keywords of information elements included in one set, a keyword having an appearance rate that is equal to or greater than a threshold value, said keywords comprising words that are keywords for determining the same facts included in the information elements, and chosen from the group consisting of anchors, links, text, nouns, predetermined proper nouns; and predetermined verbs;" in contradistinction to Weiss's disclosure of "[0031] Preferably, the set of properties comprises parameters relating to the site's importance, the nature of the site's owner, the existence of an e-store within the site, the existence of a "chat room" within the site, the existence of a forum within the site, the existence of multimedia file(s) and/or their amount and/or size within the site, the frequent used keywords in the textual data of the site, whether the site in "official", the essence of the site, and/or the amount of information in the site."

Weiss discloses a less fine (more coarse) measure, i.e.,

> "[0032] Preferably, the importance of a Web site is a function of the hyperlinks pointing to and from a Web site.
>
> "[0033] Preferably, the amount of information in a Web site is determined according to the number of characters, and/or the number of words, and/or the number of bytes included within the Web site."

This disclosure of the number of hyperlinks into or out of site and the size of the site is different then the number of identified keywords in the site. Size and

number of hyperlinks is clearly different from Applicants' use of "keywords" as described above[22].

And while Weiss's mentions "keywords" the context is clearly different[23] and Weiss's description of "clustering" is "on a sentence level"[24] while other cited parts of Weiss et al. describe "Indexing", i.e., [0146]-[0150] and output (0158].

Nakao does not overcome the deficiencies of Weiss. Specifically, Claim 10 of Nakao[25] recites such limitations as

> keyword extracting,
>
> calculating a likelihood ratio based on a comparison of a use frequency of the word in the process target topic passage with a use frequency of the

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22 "selecting, from keywords of information elements included in one set, a keyword having an appearance rate that is equal to or greater than a threshold value, said keywords comprising words that are keywords for determining the same facts included in the information elements, and chosen from the group consisting of anchors, links, text, nouns, predetermined proper nouns; and predetermined verbs;"

23 [0045] In another aspect, the invention is directed to a method for finding sub-groups having a common basis in a set of Web sites, comprising: clustering the set of Web sites by determining groups having a common basis by their being related by hyperlink(s) pointing to and from each of the Web sites; and labeling the determined groups by analyzing their content.

[0046] Preferably, the analyzing is carried out by detecting keywords frequently used in a determined group. (emphasis added)

24 [0137] FIG. 7 schematically illustrates an example of a presentation of the results of the first stage of a search, according to a preferred embodiment of the invention. The search was for the phrase "Charlie's Angels". Optionally, the results are presented in a 2-D map on which the main clusters are displayed as continents: the Sport continent, the Entertainment continent, the Health continent, etc. The Clusters, in which the term "Charlie's Angels" appeared, are marked for the user. Of course alternatively this presentation can be a textual presentation or most preferably 3D presentation.

25 10. A digest generator apparatus, comprising:
a keyword extracting unit evaluating whether or not a word is characteristic of a process target topic passage in a document by calculating a likelihood ratio based on a comparison of a use frequency of the word in the process target topic passage with a use frequency of the word in a longer topic passage including the process target topic passage and comparing the likelihood ratio to a predetermined threshold value, and extracting a keyword from the process target topic passage when the likelihood ratio is greater than the predetermined threshold value;
a generating unit generating a digest according to a use condition of said keyword; and
an outputting unit outputting said digest.

word in a longer topic passage including the process target topic passage and comparing the likelihood ratio to a predetermined threshold value,

extracting a keyword from the process target topic passage when the likelihood ratio is greater than the predetermined threshold value;

generating a digest according to a use condition of said keyword; and outputting said digest.

But, what\Nakao fails to show are the claim limitations of

(the) keywords comprising words that are keywords for determining the same facts included in the information elements,

chosen from the group consisting of anchors, links, text, nouns, predetermined proper nouns; and predetermined verbs;

a display step of displaying the contents of said extracted information elements while changing the display state of said contents in accordance with the number of sites whereat said facts are referred to;

and said step of displaying comprising extracting a set of important information elements on a sentence level from a group composed of a predetermined number of sites, and folding the display for the same sets of important information elements.

These material limitations are neither taught nor suggested by Nakao.

Claims 4, 13, 18, 24, and 26 contain substantially essentially the same limitations as claim 1, and the same art was cited against them. Thus, the same arguments apply

With respect to claim 9[26], the passage in Logan, column 5, lines 3-10[27], Logan neither teaches or suggests

> "determining whether, of said information elements extracted from said multiple sites, there are relevant information elements that convey the same facts as sentence-level information elements that constitute an arbitrary web page; and when said relevant information elements that include the same facts as said sentence-level information elements are present in said information elements obtained from said multiple sites, adding remark information to said sentence-level information elements to provide information concerning said arbitrary web page."

With respect to independent claims 16[28] and 25[29] the cited clause at column 4, lines 43-45 of Brown neither teaches nor suggests the claimed combination.

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[26] (Currently Amended) 9. An information rearrangement method comprising the steps of: extracting information elements from multiple sites; said step of extracting information elements comprising selecting, from keywords of information elements included in one set, a keyword having an appearance rate that is equal to or greater than a threshold value, said keywords comprising words that are keywords ~~effective~~ for determining the same facts included in the information elements, and chosen from the group consisting of anchors, links, text, nouns, predetermined proper nouns; and predetermined verbs, and determining whether, of said information elements extracted from said multiple sites, there are relevant information elements that convey the same facts as sentence-level information elements that constitute an arbitrary web page; and when said relevant information elements that include the same facts as said sentence-level information elements are present in said information elements obtained from said multiple sites, adding remark information to said sentence-level information elements to provide information concerning said arbitrary web page.

[27] The metadata which describes a particular resource need not be derived directly from that resource; for example, external resources which link to or which review a given resource may be used as a source of metadata which describes the given resource. By way of example, reviews or comments on a given Web site may be analyzed to develop an attribute value which quantifies the degree to which such comments and reviews were favorable or unfavorable.

[28] (Previously Amended) 16. An information processing apparatus for rearranging information obtained from information sources connected via a network comprising: information collection means for collecting information from a predetermined number of registered sites; information element extraction means for extracting, from among said collected information, information elements that include the same facts that are referred to at multiple sites, the information element extraction means comprising a keyword extraction means for extracting keywords based on keywords for metadata stored in a metadata; a keyword importance level calculation means for calculating a keyword importance; a sentence-level information element extraction means for calculating a set of sentence-level information elements, a topic keyword extraction means for extracting from the entire set of information elements extracted by the sentence-level information elements extraction means, and a word-level information element extraction means, for extracting information elements in which a combination of keywords that are obtained by the keyword importance level calculation means appear, topic keyword extraction means for extracting a topic keyword that represents the entire set of information elements to be

Figure 3 of Lawrence et al. merely shows one form of output, and neither nor suggest the claimed invnetion.

Thus, the claimed combination is not taught or suggested by Nakao alone, Logan alone, Brown alone, Lawrence alone, Weiss alone, or any combination of Weiss with Nakao, Lawrence, Brown, or Logan.

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extracted, said topic keyword extraction means comprising a representative keyword extraction means, a set representative keyword extraction means, and a topic keyword collection means, whereby results extracted by sentence-level important information element extraction means, topic keyword extraction means, and word-level important information element extraction means are stored in an important information element; and display means for displaying the contents of said extracted information elements, while displaying said extracted topic keyword at a position different from the contents concerning said information elements.

[29] (Currently Amended) 25. A storage medium on which a computer-readable program is stored, which permits a computer to perform: a process for collecting information from a predetermined number of registered sites; a process for extracting, from among said collected information, information elements that include the same facts that are referred to at multiple sites, said information element extraction processing step comprising selecting, from keywords of information elements included in one set, a keyword having an appearance rate that is equal to or greater than a threshold value, said keywords comprising words that are keywords ~~effective~~ for determining the same facts included in the information elements, and chosen from the group consisting of anchors, links, text, nouns, predetermined proper nouns; and predetermined verbs;[[[;]]] a process for extracting a topic keyword that represents the entire set of information elements to be extracted; and a process for displaying the contents of said extracted information elements, while displaying said extracted topic keyword at a position different from the contents concerning said information elements.

Conclusion

It is respectfully submitted that the pending claims address the points raised in the Office Action of January 30, 2006 and describe an invention that is properly allowable to the Applicants.

If any issues remain unresolved despite the present amendment, the Examiner is requested to telephone Applicants' Attorney at the telephone number shown below to arrange for a telephonic interview before issuing another Restriction Requirement or Advisory Action.

Applicants would like to take this opportunity to thank the Examiner for a thorough, complete, exhaustive. and competent examination and for courtesies extended to Applicants' Attorney.

Respectfully Submitted

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